



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,968	07/11/2003	Keiji Ohama	0020-5156P	2867
2292	7590	01/12/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				GORDON, RAEANN
ART UNIT		PAPER NUMBER		
		3711		

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/616,968	OHAMA ET AL.
	<b>Examiner</b> Raeann Gorden	<b>Art Unit</b> 3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 18 October 2004.

2a) This action is FINAL.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3 and 5-16 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,5 and 7-16 is/are rejected.

7) Claim(s) 6 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, and 7-16 are rejected under 35 U.S.C. 103(a) as obvious over Sugimoto (6,390,936) in view of Kato (2003/0064828). Regarding claims 1 and 2, Sugimoto discloses a golf ball comprising a center, an intermediate layer, and a cover. The intermediate layer has a thickness of 2.5 (table 4). Sugimoto discloses the intermediate layer has a Shore D hardness from 53 to 64 (col. 5, lines 40-43). The hardness of the intermediate layer is higher than the surface of the center (table 4). With respect to the flexural modulus, applicant claims the flex modulus of the intermediate layer is lower than the flex modulus of the cover layer. The intermediate layer has a specific gravity from 1.1 to 1.35. Since the present invention and the Sugimoto disclose identical ingredients for the two layers the flex modulus values would also overlap or be the same. Sugimoto discloses the intermediate layer is made from polybutadiene, co-crosslinking agent, organic peroxide and a filler. The co-crosslinking agent may be a metal (magnesium or zinc) salt of  $\alpha$ ,  $\beta$ -unsaturated carboxylic acid. Sugimoto does not disclose at least 4 parts by weight of organic peroxide. However, Kato teaches a golf ball comprising an intermediate layer with up to 5.0 parts by weight

of organic peroxide (para. 31). Regarding claim 3, Sugimoto discloses a cover with a Shore D hardness from 45 to 60 (col. 6, lines 62-63). The cover has a thickness from 1.0 to 3.0 mm. Applicant discloses cover materials may be Himilan 1605, 1706, 1855, etc. and Sugimoto discloses the same cover materials, therefore the flexural modulus values would be the same. Regarding claim 5, the center has a central hardness from 65 to 80 JIS-C (41-53 Shore D) and a surface hardness from 65 to 85 (41-57 Shore D). Regarding claims 7 and 8, the center has a diameter from 29 to 38 mm and the core has a diameter from 38 to 41 mm. Therefor, the intermediate layer thickness is satisfied. The intermediate layer has a hardness from 80 to 95 (53-64 Shore D). Regarding claims 9 and 10, the intermediate layer has a specific gravity from 1.1 to 1.35. Since the present invention and Sugimoto in view of Kato disclose identical ingredients for the intermediate layer the flex modulus values would also overlap or be the same. Regarding claims 11-13, the intermediate layer is higher than the cover layer by 5 Shore D units (table 4, ex 1 and 3). Regarding claim 14, Sugimoto discloses the cover layer has a Shore D hardness from 45 to 60. Applicant discloses cover materials may be Himilan 1605, 1706, 1855, etc. and Sugimoto discloses the same cover materials, therefore the flexural modulus values would be the same. Regarding claims 15 and 16, since the present invention and the Sugimoto in view of Kato disclose identical ingredients for the two layers the flex modulus values would also overlap or be the same. One of ordinary skill in the art would have increased the amount of organic peroxide for improved hardness.

***Allowable Subject Matter***

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 10-18-04 have been fully considered but they are not persuasive. Applicant argues the primary reference, Sugimoto, does not disclose a co-crosslinking agent comprising a metal other zinc and at least 4 parts of organic peroxide in the intermediate layer. With respect to the co-crosslinking agent, Sugimoto clearly discloses zinc or magnesium metal salts (col. 3, lines 14-15). While the examples do disclose the use of zinc acrylate the remaining disclosure cannot be ignored. With respect to the organic peroxide, it is clear Sugimoto only discloses up to 3 parts of organic peroxide, hence the 103 rejection above in view of Kato. Kato is cited as a secondary reference to teach that larger amounts of organic peroxide are not new. Again, applicant is ignoring the disclosure and only relying on the examples. It should be abundantly clear the examples cannot disclose each and every element of the specification. As shown in the rejection above, Kato teaches up to 5 part of organic peroxide. Applicant further argues Kato does not teach the use of a metal other zinc for the carboxylic acid. Kato is cited as a secondary reference to teach organic peroxide. However, Kato does teach the use of zinc or magnesium metal salts.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 571-272-4409. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rg  
January 7, 2005



RAEANN GORDEN  
PRIMARY EXAMINER